

Leading and Supporting Improvement Projects

Minnesota Office of
Continuous Improvement



Agenda



1. Welcome
2. How people react to change
3. Project context
4. 5 Elements of project success
5. Launching your project
6. Implementing changes
7. Monitoring results
8. Sustaining improvements

Learning Objectives



- Understand how people react to change
- Learn the 5 elements for successfully managing the people-side and technical-side of an improvement project
- Learn criteria for selecting an improvement project
- Know the roles, steps and tools for conducting an improvement project
- Build skills through simulation exercises



Welcome



Please share your:

- Name
- Organization

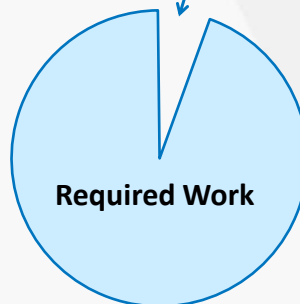
What is an Improvement Project?



A targeted and managed initiative to enhance performance.

- Improving quality
- Reducing costs
- Improving speed

Targeted and Managed Improvements
(2-10% of resources)



The Improvement Continuum



Incremental
(local improvement)

Improving what exists



Systematic
(evolutionary)

Distinctly different/better



Revolutionary
(breakthrough)

Radically new & different/better

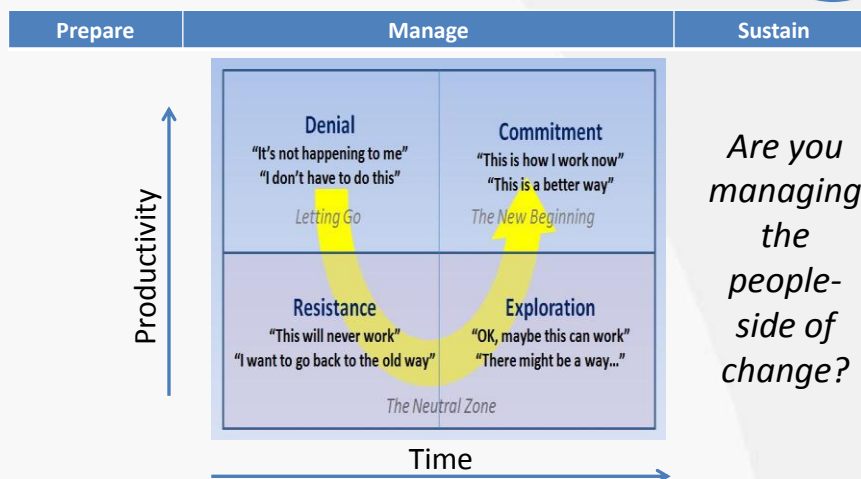


Improvement = Change



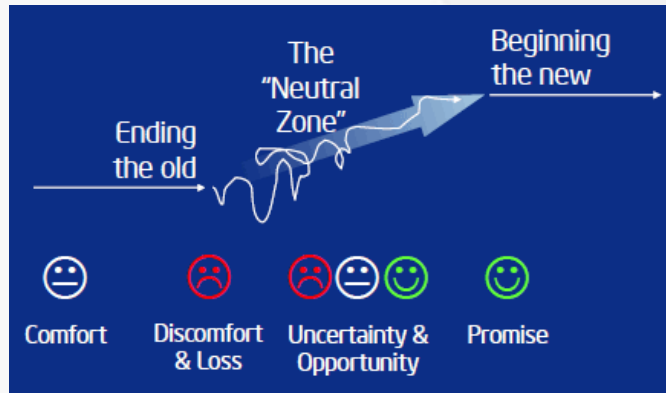
- How do People React to Change?
- Video

How do People React to Change?



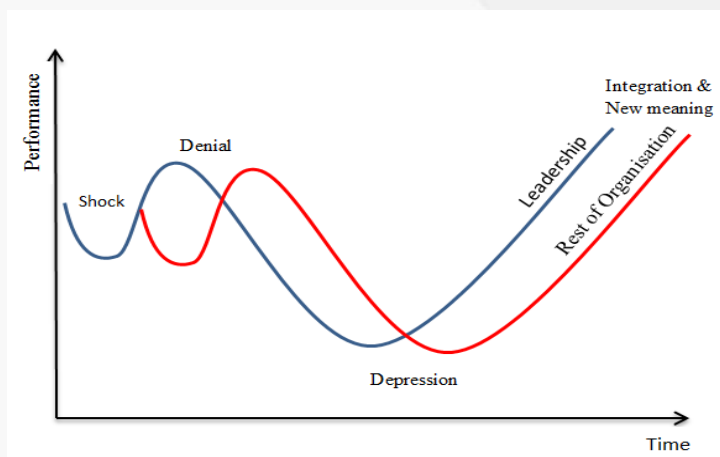
Source: Bill Bridges' Individual Transition Model

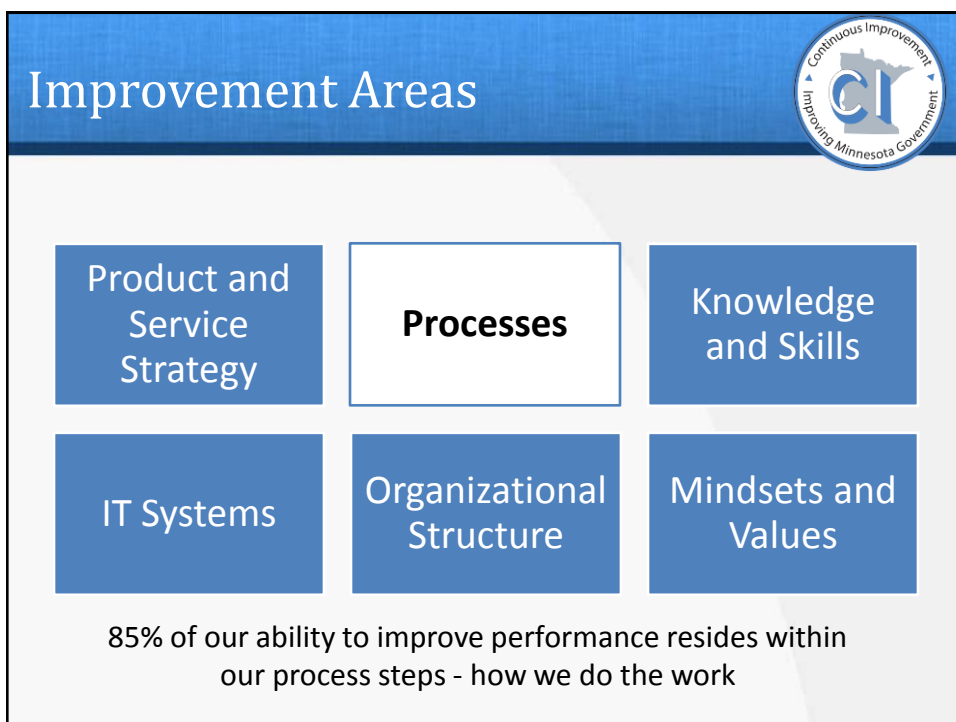
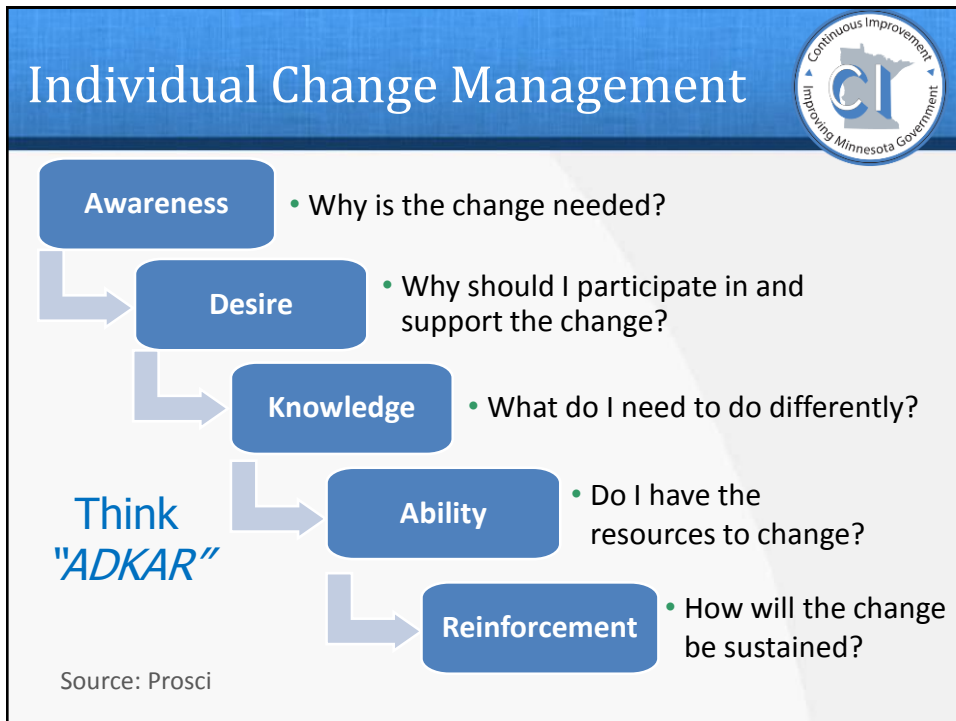
Individual Change



Source: Bill Bridges' Individual Transition Model

Leadership Typically Starts the Change Process Sooner





It's about the Process



“A bad process
will beat
a good person
every time”

- W. Edwards Deming

How Do We Straighten the Pipes?



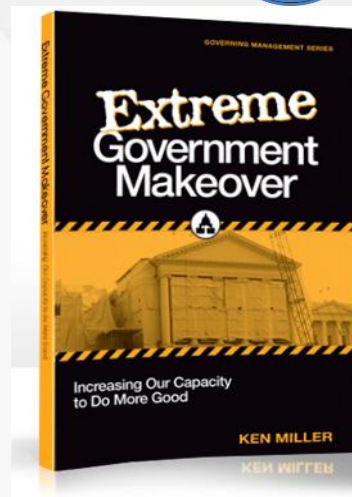
*The work of government
is noble.*

*The people of government
are amazing.*

*The systems of
government are a mess.*

Ken Miller

Extreme Government Makeover, 2011



Some Best Practice Approaches



CI Approach	Description
Six Sigma	An approach for reducing process errors and variation using improvement experts, a structured method (DMAIC)*, performance measures, and tools. * Define, Measure, Analyze, Improve, Control
Lean (TPS)	A mindset, method (PDCA/PDSA),* and set of tools for improving work areas and processes by eliminating waste. Some common Lean tools: 5S, Kaizen, standard work, error proofing, visual management, and 5 Whys. * Plan, Do, Study/Check, Act
Process Preparation (2P)	2P - An approach for engaging the creativity and lean knowledge of subject matter experts to design or dramatically redesign a process. Typical applications: developing specifications for new computer software and developing a process for a new service.
WorkOut	A management tool for quickly identifying and prioritizing improvement opportunities within a process (value stream) by engaging people who do the work.

Improvement Project Types



WorkOut

5S

Problem
Solving

Kaizen Event

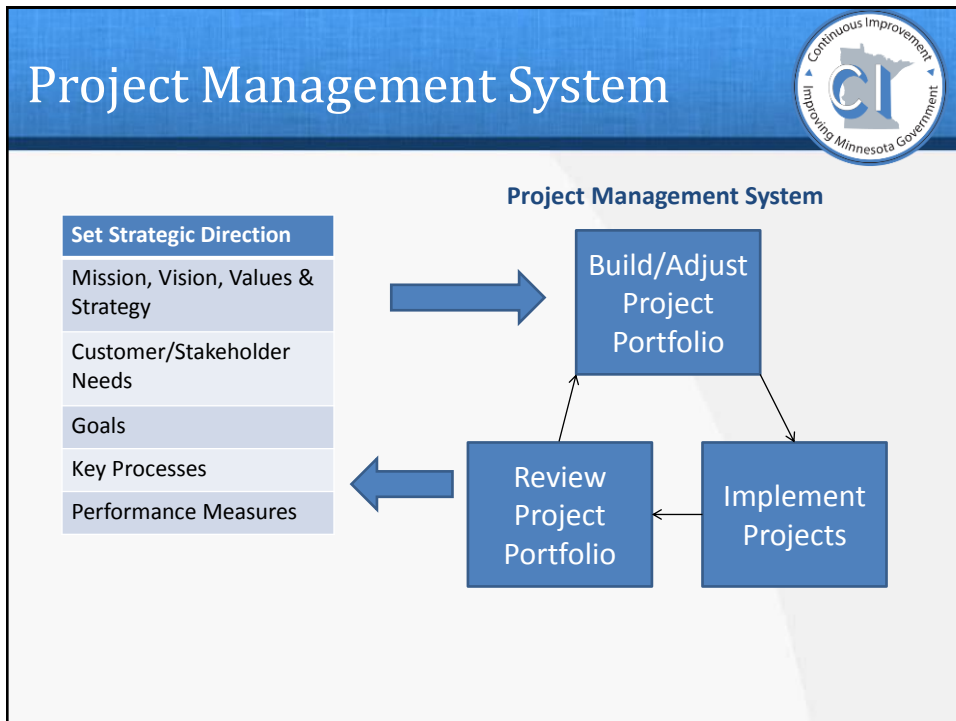
Complex
Improvement

Design/
Redesign

Your situation and project objective will define your project type

Plan			Do	Study	Act
Define	Measure	Analyze	Improve		Control
Tools <ul style="list-style-type: none"> • Project Charter • Team Norms • SIPOC Diagram • Voice of the Customer Techniques • Stakeholder Map • Benchmarking • Tollgate questions 	Tools <ul style="list-style-type: none"> • Swim Lane Map • Value Stream Map • Spaghetti Map • Process Analysis • Control Chart • Statistics • Cost/Benefit Analysis • Performance measures • Tollgate questions 	Tools <ul style="list-style-type: none"> • Brainstorming • Cause and Effect Analysis (Fishbone) • 5 Whys • Affinity Diagram • Relations Diagram • Surveys • Tollgate questions 	Tools <ul style="list-style-type: none"> • Brainstorming • Idea Box • Ranking and Voting • 2 x 2 Table • Decision Matrix • Cost/Benefit Analysis • Impact Wheel • FMEA • Mistake Proofing • Implementation Plan • Performance Measures • Before/After Analysis • 5S • Tollgate questions 		Tools <ul style="list-style-type: none"> • Control Plan • Standard Work • Post-Project Review • Storyboard • Visual Measures • Tollgate questions

CI Project Roles		
Sponsor (Project Owner)		Make decisions, provide resources, ensure project success
Team Leader (Project Manager)		Lead Team and coordinate implementation of changes
Facilitator (CI Coach)		Facilitate improvement process & help team achieve project goal(s)
Team Member (SMEs+)		Achieve project goal(s) and prepare deliverables



1. Small Group Exercise

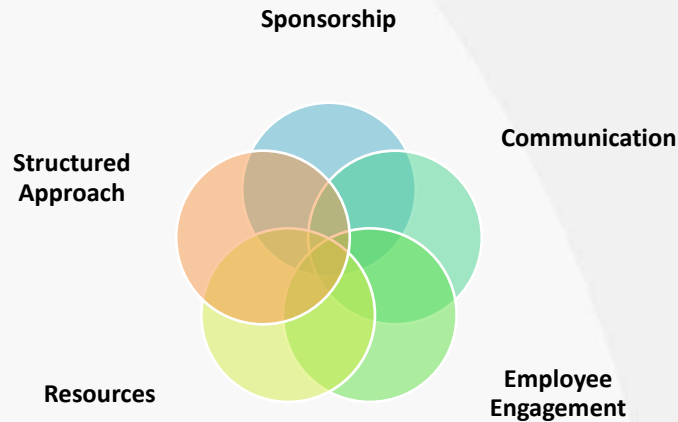
15 minutes

1. Form small groups
2. Introduce yourselves
3. Label posters with your question
4. List team responses
5. Identify your top three
6. Select a team name
7. Select someone to report out

10

8. Small Group reports (2 minutes/group)

5 Elements of Project Success



Sponsorship



1. Create or ratify project scope and goals
2. Provide frequent, 2-way communication
3. Show commitment in your words and actions
4. Allocate resources (people, time, materials, \$)
5. Approve changes/recommendations
6. Manage resistance and remove barriers
7. Ensure implementation
8. Reward and recognize employees

Sponsor is a verb – not a title

Communication



Employee Communication Needs

If there is No...	Message Received...
1. Clear & compelling case for the change (what and why)	"It's not urgent"
2. Resources (staff, time, \$)	"It's not real"
3. Benefits of change (WIIFM)	"It's not worth it"
4. Structured process and clear, achievable action plan	"It's not going anywhere"
5. Staff knowledge, skills and abilities in place	"It's not possible"
6. Reinforcement/consequences	"It's not going to last"

Provide 2-Way Communication



- Communicate 7 times and 7 ways
- Provide a contact for people with questions, comments, or concerns
- Send the right message
- To the right audience
- At the right time
- From the right sender
- Through the right channel

Communicate before, during and after the project

Communication Plan



Audience	Message Purpose and Content	Delivery Format	Sender	Date

Employee Engagement



- People support what they help to create – early involvement builds buy in
- Morale and productivity increase when staff are able to improve their work
- Staff are closer to the customer, so typically know what is and is not working
- Tap into the wisdom of crowds – leverage staff talent

Engage the Right People



Selecting Team Members:

- Process participants – SMEs, Information suppliers, process customers
- Technical support – IT, facilities, Internal control
- 1 outside set of eyes – Not essential but good idea
- Balance CAVE dwellers



Resources



Do employees have:

- Clear performance expectations?
- Knowledge and skills?
- Ability / Time?
- Willingness?
- Equipment, materials, and tools?
- Encouragement?



Structured Approach



- Your situation will determine what approach and set of tools are most appropriate
- Manage both the technical and people-side of change
- Involve a CI coach, facilitator, project manager, or OD practitioner to determine the best approach
- Have a clear and realistic action plan
- Monitor and manage performance
- Adjust and sustain improvements

Project Phases




Plan			Do	Study	Act
Define	Measure	Analyze	Improve		Control
What results do we want?	Where should we focus?	What are the root causes of problems?	What solutions should we implement? Did the solutions achieve our desired results?		What adjustments should we make? How will we sustain results?

Project Steps		
Plan	Define	1. Identify, prioritize and select improvement projects
		2. Set project scope and goals
	Measure	3. Understand the current situation
	Analyze	4. Analyze the current situation (define root causes)
Do	Improve	5. Define a vision of success
		6. Generate, evaluate and select improvements
		7. Implement changes and make adjustments
Study		8. Measure performance
Act	Control	9. Document standard work and lessons learned
		10. Sustain improvement


1. Select Improvement Project	
<ul style="list-style-type: none"> • Environmental scan - review performance data • Go to the “Gemba” • Benchmark other organizations • Research promising practices • Ask performance improvement questions • Solicit input from stakeholders <ul style="list-style-type: none"> – Conduct a WorkOut – Surveys, focus groups, interviews, and suggestion boxes - only if you will act on the information and share results! 	

Project Selection Criteria



Alignment	<ul style="list-style-type: none"> Strategic importance
Impact	<ul style="list-style-type: none"> Project will benefit a large number of stakeholders/customers Process involves a lot of internal resources to administer Process is important and has high visibility to stakeholders/customers
Need	<ul style="list-style-type: none"> Public perception/pressure regarding the need for improvement Process is not working well (complaints, rework, defects, unhappy staff) It is a core business process that affects many other processes
Ability	<ul style="list-style-type: none"> Staff have the time and resources (equipment, materials, training, facilitation support) to participate in the project and implement changes Data is available to understand the current state and track performance
Willingness	<ul style="list-style-type: none"> Manager is committed to making needed changes Employees willing to serve on a team and implement project changes Employees are dissatisfied with the current state (i.e., pain level is high)

2. Set Project Scope and Goal



- What is IN scope (first step & last step)?
- What is OUT of scope?
- What are the project parameters or givens?
- Elements of a good (SMART) project goal:
 - Defines the topic /process
 - Provides the direction of improvement (increase or decrease)
 - Specifies improvement area (time, defects, % complete and accurate, cost, satisfaction)
 - Includes current and targeted performance levels
 - Is clear and easy to communicate
 - Is approved by the project sponsor
 - Aligns with the organization's strategic priorities

Example: Reduce the time it takes to pack a meal box from 3 minutes to 1.5 minutes by <date>.



A3 PROJECT CHARTER: < TITLE>		<small>Date: <date> Sponsor: <sponsor></small>																																									
CONTEXT / ISSUES		VISION OF SUCCESS																																									
GOALS		PROJECT MILESTONES & SCHEDULE <table border="1" style="width: 100%; border-collapse: collapse; text-align: left;"> <thead> <tr style="background-color: #d9e1f2;"> <th style="text-align: left;">Project Milestones</th> <th style="text-align: left;">Owner</th> <th style="text-align: left;">Proposed Date</th> <th style="text-align: left;">Actual Date</th> </tr> </thead> <tbody> <tr> <td>1. Set project scope and goals (prepare Project Charter, engage team, collect data)</td> <td>Sponsor/Team Leader, Facilitator</td> <td></td> <td></td> </tr> <tr> <td>2. Understand the current situation</td> <td>Facilitator/ Team</td> <td></td> <td></td> </tr> <tr> <td>3. Analyze the current situation (root causes)</td> <td>Facilitator/ Team</td> <td></td> <td></td> </tr> <tr> <td>4. Define a vision of success</td> <td>Facilitator/ Team</td> <td></td> <td></td> </tr> <tr> <td>5. Generate, evaluate and select improvements</td> <td>Team/ Sponsor</td> <td></td> <td></td> </tr> <tr> <td>6. Implement changes and make adjustments</td> <td>Team Leader/ Staff</td> <td></td> <td></td> </tr> <tr> <td>7. Measure performance</td> <td>Sponsor/Team Leader</td> <td></td> <td></td> </tr> <tr> <td>8. Document standard work and lessons learned</td> <td>Team</td> <td></td> <td></td> </tr> <tr> <td>9. Sustain improvement</td> <td>Team Leader/ Process Owner</td> <td></td> <td></td> </tr> </tbody> </table>		Project Milestones	Owner	Proposed Date	Actual Date	1. Set project scope and goals (prepare Project Charter, engage team, collect data)	Sponsor/Team Leader, Facilitator			2. Understand the current situation	Facilitator/ Team			3. Analyze the current situation (root causes)	Facilitator/ Team			4. Define a vision of success	Facilitator/ Team			5. Generate, evaluate and select improvements	Team/ Sponsor			6. Implement changes and make adjustments	Team Leader/ Staff			7. Measure performance	Sponsor/Team Leader			8. Document standard work and lessons learned	Team			9. Sustain improvement	Team Leader/ Process Owner		
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SCOPE (IN BOUNDS)	SCOPE (OUT OF BOUNDS)	RESOURCES <ul style="list-style-type: none"> Time commitment for a 4 day Kaizen, excluding time to implement changes: Sponsor (6-10 hrs.); Team Leader (40 hrs.); Team Members (32 hrs.); Facilitator (40-50 hrs.) External Resources: Equipment: Materials: 																																									
CUSTOMERS/STAKEHOLDERS	TEAM MEMBERS <ul style="list-style-type: none"> Team Leader: Team Members: 																																										
CUSTOMER REQUIREMENTS (CTQ)																																											

Hold Project Kickoff



Purpose: Get everyone on the same page.

- Components:

1. Subject area (project title)
2. Why the project is needed – including risk of not changing (sticking with status quo)
3. Anticipated customer and staff impacts (positive and negative)
4. Team/staff expectations and responsibilities, including time commitment
5. Contact person for questions, comments and concerns
6. Answer staff questions
7. Consider signing a “Project Commitment”
8. Provide training or team building (e.g., CI/Lean)

Change begins with understanding why

3. Understand the Current Situation



- Prepare a SIPOC diagram
- Conduct a stakeholder analysis and define customer requirements
- Map the current state process
- Collect customer, program, and process data

For a deeper dive into defining and collecting metrics take the *Process Improvement Measurement* course

Define Customers Requirements



- **End Users:** people who use your products to achieve a desired outcome(s).
- **Brokers:** agents of the producer or users who transfer or assist someone to use your products and services.
- **Fixers:** agents who repair, correct, modify or adjust products for the benefit of the user.

In government, taxpayers are analogous to Investors. They are an important stakeholder, but not the primary driver of service design and delivery. End user customers are the most important customer and who we should have in mind when we design and deliver a service/product.

Ken Miller, "We Don't Make Widgets"

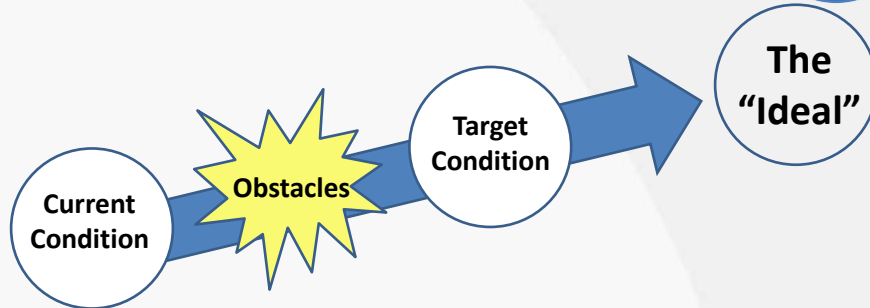
4. Analyze the Current Situation



- Identify process strengths and weaknesses
 - What steps are value-added?
 - Where are the 8 Wastes?
 - How close is the process to an "Ideal" process?
- Define root causes
 - 5 Whys
 - Fishbone Diagram
 - Affinity and Relations Diagrams

To learn how to apply root cause analysis tools take the *Problem Solving* course

5. Define a Vision of Success



1. What does success look like for our customer?
2. What does success look like for other stakeholders?

6. Generate Ideas/Solutions



Brainstorming Rules:

- Defer judgment
- Strive for quantity
- Seek unusual & wild ideas
- Combine & build on ideas



- Set a quota for the number of ideas to ensure divergent thinking

Improvement Strategies



Handoffs and batching are common barriers to process flow



Eliminate non-value added tasks



Combine tasks or functions



Concurrent processing



Co-locate work



Shift roles and responsibilities



Eliminate or reduce batching

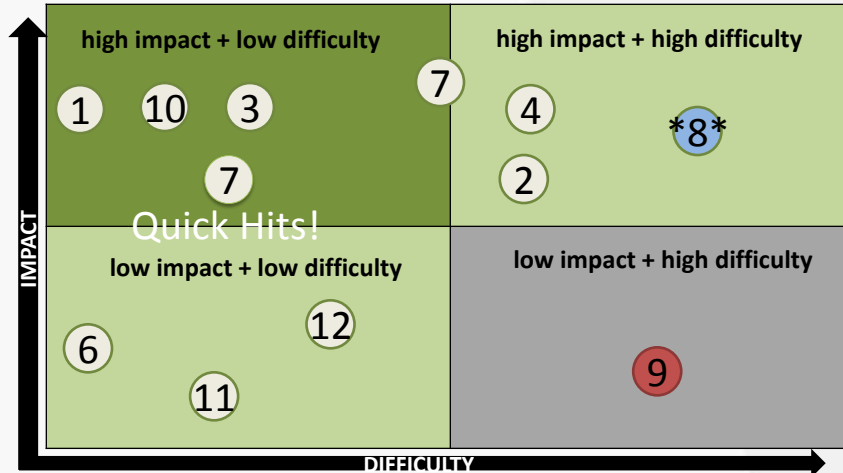


Automate



Solve Problems

Evaluate & Select Improvements



7. Implement Changes



1. Pilot test improvements
2. Make needed adjustments (rapid tests of change)
3. Develop an action plan for full-scale deployment of changes
 - Include in your action plan how and when you will monitor performance
 - Have a strategy for identifying and resolving issues, including resistance
4. Implement changes ... **and make adjustments**

Change Readiness Ruler



- Pick one of your solutions
- Rate your comfort level with the change
- Share results with your team
- Discuss possible reasons for lower ratings, and what actions might improve readiness for the change

Action Plan



What	Who	When	Status*
1.			
2.			
3.			
4.			

* **Green** = on schedule, **Yellow** = slightly behind schedule, **Red** = significantly behind schedule

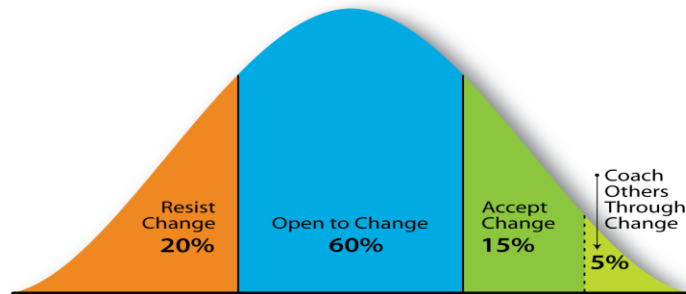
Track and Resolve Issues



PLAN		DO		STUDY	ACT
What	Who	When	Effective (Y/N)	Adapt/Adopt/Abandon	

● = Completed task
 ● = Need help/over

Recognize and Manage Resistance



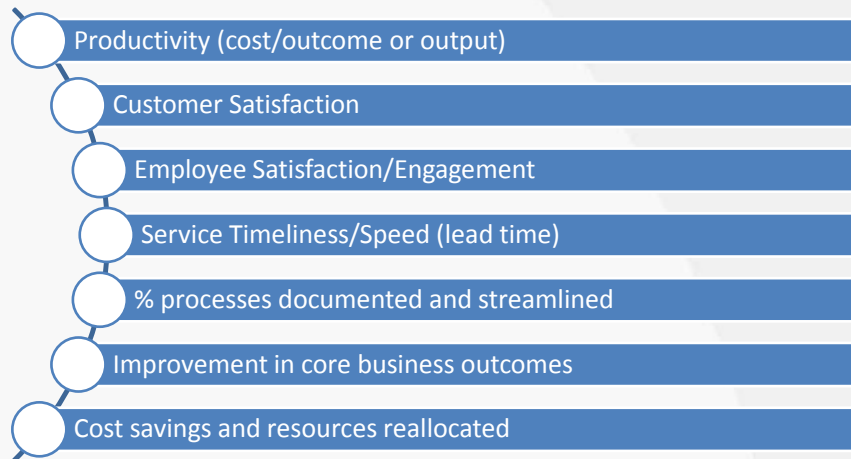
Lack of awareness is the most common reason for resistance

Remove Barriers



- Go to the Gemba:
 - Observe
 - Ask Questions
 - Learn
 - Show respect
- Ask “How is it going?” and “What can I do to help?”
- Engage in conversations to remove barriers

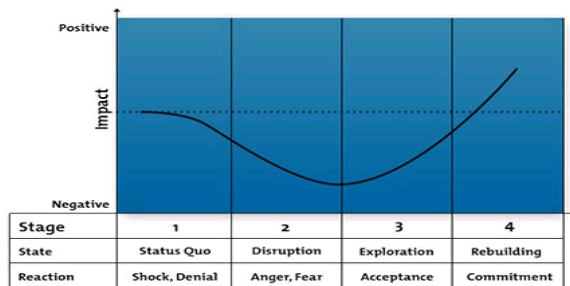
8. Measure Performance



Monitor Performance



- 30, 60, & 90-day status meetings with sponsor
- Assess results and capture learning:
 - Was the plan followed? (Yes or No) and Why?
 - Were desired results achieved? (Yes or No) and Why?



9. Document Standard Work



PROCESS PROFILE

Title:	Date:
Department/Office:	Owner:
Process Purpose/ Description:	
Ideal Process / Desired Future State	
Scope: (first and last step in process)	
References: (applicable federal, state and district requirements/policies/procedures)	
Customers: (from SIPOC Diagram) • Customer Requirements	Suppliers: (from SIPOC Diagram) • Supplier Requirements
Tool/Equipment Requirements	Templates and Forms (inputs & outputs)
Process Map/Steps	Roles and Responsibilities (RACI Diagram)
Glossary	Training
Performance Measures: (2-3 success indicators)	

Capture Lessons Learned



- Review Project Charter and goals
- What did we accomplish?
- Where did we struggle?
- What questions do we still need to answer?
- What did we learn?
- What actions should we take to capture our learning and leverage our ability to improve our services for customers and staff?



10. Sustain Improvement





- Close action plan and transfer responsibility for sustainment to process owner
- Make sure people do not slip back to the “old way of doing things”
- When results are not achieved or sustained:
 - Performance potential is not realized
 - Momentum is lost
 - Credibility diminished
 - Cynicism and frustration increases
 - Status quo prevails
- Expect to improve a process multiple times (3-5 times) to remove wastes and get closer to the “Ideal”

Reinforce Desired Behaviors



Consequences	Short-term	Long-term
	<ul style="list-style-type: none"> • Formal and informal recognition • Performance reviews • Coach & mentor • Celebrations 	<ul style="list-style-type: none"> • Performance measures • Job descriptions • Promotion • Celebrations
	<ul style="list-style-type: none"> • Crucial conversations • Probation • Corrective action plan 	<ul style="list-style-type: none"> • Change job • Demotion • Fire • Transfer


Change is a process...

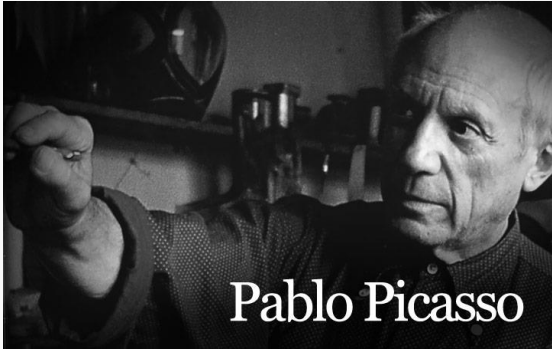
Current State → Transition State → Future State

Not an event.

Emphasis on Action – not Perfection



"Action is the foundational key to all success."



Pablo Picasso

Keep in Mind...



Quality is everyone's responsibility.

- W. Edwards Deming

Improvement begins with I.

- Arnold H. Glasgow

Learn More!



- Books
 - Ken Miller's *We Don't Make Widgets*
 - John P. Kotter's *Leading Change*
 - Ken Miller's *Extreme Government Makeover*
- Join the State of MN CI User Group and Yammer Network: yammer.com/minnesotacontinuousimprovementcommunity
- Take additional training

For More Information



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Thank You !